

## AMENDMENT NO. 1 TO COSUMNES FLOODPLAIN MITIGATION BANK

THIS AMENDMENT NO. 1 ("Amendment") to the Cosumnes Floodplain Mitigation Bank ("Bank") is made and entered into as of 10/14/10 ("Effective Date"), by and among Westervelt Ecological Services ("Bank Sponsor" and "Property Owner,"), and the Sacramento District of the U.S. Army Corps of Engineers ("USACE"), Region IX of the U.S. Environmental Protection Agency ("USEPA"), the National Oceanic and Atmospheric Administration National Marine Fisheries Service ("NMFS"), and the California Department of Fish and Game ("CDFG"), Region 2 Office (each a "Party" and, together, the "Parties"), with reference to the following facts:

### BACKGROUND

A. The Cosumnes Floodplain Mitigation Bank Enabling Instrument (the "Agreement") was made and entered into as of 30 September 2009. Initially-capitalized terms used in this Amendment and not otherwise defined herein shall have the meaning set forth in the Agreement.

B. The Bank occurs on real property comprised of approximately 493.0 acres (the "Property"), located near the City of Galt, County of Sacramento, State of California, designated Assessor's Parcel No(s). 146-0140-003, 146-0140-004. The Bank occupies a 471.71-acre portion of the Property.

C. The Interagency Review Team ("IRT") is the interagency group which oversees the establishment, use, operation, and maintenance of the Bank. The agencies which are Parties to the Bank are jointly referred to as the IRT. At the time of execution of the Agreement, NMFS was a member of the IRT, but was not prepared to become a signatory.

D. One purpose of this Amendment is to add NMFS as a signatory to the Agreement.

E. A second purpose is to clarify the habitat enhancement activities on the riparian forest and revise the terminology of these credits. A total of 38.13 acres of existing riparian forest occur on the Bank. This acreage occurs on the higher floodplain terrace of the Bank, and as such the credits associated with this habitat are considered non-wetland Waters of the U.S. under Section 404 of the Clean Water Act. Attachment A to this Amendment clarifies the habitat enhancement activities which shall occur within this acreage. Terminology of this credit type is hereby modified from "Riparian Forest Preservation" to "Riparian Forest Enhancement". These credits will not qualify as compensatory mitigation for wetlands impacts as regulated by the USACE or USEPA.

NOW, THEREFORE, in consideration of the foregoing facts and the terms, covenants and conditions set forth below, the Parties hereby agree the Bank Agreement is modified as follows:

## AGREEMENT

1. The introductory paragraph of the Agreement is hereby modified to include the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) as a member of the IRT and Party to the Bank.

2. The following definition is hereby inserted as Recital E: NMFS, an agency within the U.S. Department of Commerce, has jurisdiction over the conservation, protection, and recovery of marine and anadromous species pursuant to the federal Endangered Species Act of 1973.

3. The following definition is inserted under Authorities in Section I.B.1.n: Magnuson-Stevens Fishery Conservation and Management Act (MSA), Essential Fish Habitat (EFH) for Chinook salmon in Amendment 14 of the Pacific Salmon Fishery Management Plan pursuant to the MSA (16 U.S.C. § 1801 et seq.)

4. Section II, Definition number 6, is hereby modified to read:  
"Covered Habitat" means habitat of concern or habitat upon which the Covered Species depend for their continued viability (e.g. spawning, breeding, feeding, or growth to maturity) that the IRT determines will be adequately conserved as a result of implementation of this BEI. Covered Habitat Credits are identified in Exhibit F-1.

5. Section VII.B.2, sentence two, is hereby modified to read: "The actual number of Credits released shall be determined by CDFG and/or NMFS, as appropriate,..."

6. Section VII.B.4 is hereby modified to read:  
Any deviation from the Development Plan or failure to meet Performance Standards may reduce the number of Covered Species and Covered Habitat creation Credits available for release as determined by CDFG and/or NMFS, as appropriate, in consultation with the other IRT agencies. The Bank Sponsor shall revise the Credit Table in Exhibit F-1 as directed by CDFG and NMFS, to reflect any reduction in the available Covered Species and Covered Habitat Creation Credits.

7. Section XII.D.2.e, sentence one, is hereby modified to read: "The USACE and, CDFG, and NMFS may each terminate its participation in this BEI upon 30 days' notice to the other Parties, on the condition that each of the following has occurred ..."

8. Section XII.D.2.h is hereby modified to read: "Nothing in this Section XII.D.2 is intended or shall be construed to limit the legal or equitable remedies (including specific performance and injunctive relief) available to the USACE, CDFG, and USEPA and NMFS in the event of a threatened or actual breach of this BEI."



9. Section XII.K.3 is hereby modified to include NMFS as an IRT member with the following contact information:

NOAA' National Marine Fisheries Service  
Protected Resources Division  
Sacramento Area Office  
650 Capitol Mall, Suite 8-300  
Sacramento, CA 95814-4708  
Attn: Sacramento River Basin Branch Chief  
Telephone: 916-930-3608  
Fax: 916-930-3629

10. Terminology in Exhibit C-1 (Development Plan), Section D.5.a, is hereby modified to reflect that the Bank Sponsor will "Enhance" rather than "Preserve" 38.13 acres of existing habitat on the Bank.

11. Credit terminology in Exhibit F-1 (Credit Evaluation), Table 2, is hereby modified as follows: the heading "Preserved Habitats" to "Existing Habitats" and the credit type "Riparian Forest Preservation" to "Riparian Forest Enhancement".

12. A disclaimer shall be associated with Exhibit F-1 (Credit Evaluation), Table 2, that Riparian Forest Enhancement credits will not qualify as compensatory mitigation for wetlands impacts as regulated by the USACE or USEPA

13. Credit terminology in Exhibit F-3 (Credit Sales Ledger) is hereby modified as follows: "Floodplain Riparian Habitat Preserved" to "Riparian Forest Habitat Enhanced".

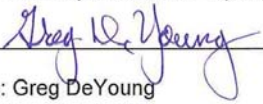
14. Except as specifically modified by this Amendment, the Agreement remains unchanged and in full force and effect.

\* \* \*

Each of the undersigned certifies that he or she has full authority to bind the Party that he or she represents for purposes modifying the Agreement. This Amendment shall be deemed executed on the date of the last signature by the Parties.

IN WITNESS WHEREOF, the Parties have executed this Amendment as follows:

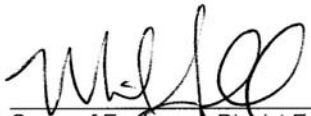
Bank Sponsor and Property Owner

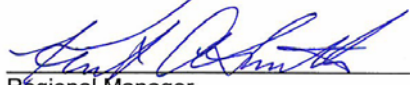
By: 

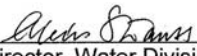
Name: Greg DeYoung

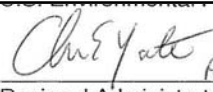
Title: Vice President

Date: 10/14/10

 10-14-10  
Date  
For Corps of Engineers, District Engineer  
Sacramento District  
U.S. Army Corps of Engineers

 10/11/10  
Date  
Regional Manager  
Region 2 Office  
California Department of Fish and Game

 12 August 2010  
Date  
Director, Water Division  
Region IX  
U.S. Environmental Protection Agency

 9 Sep 2010  
Date  
for Rodney McIntire  
Regional Administrator  
Southwest Region  
NOAA's National Marine Fisheries Service

**ATTACHMENT A**  
**COSUMNES FLOODPLAIN MITIGATION BANK**  
**Riparian Forest Enhancement Measures**

This document is intended to supplement the Cosumnes Floodplain Mitigation Bank (Bank) Bank Enabling Instrument (BEI).

Currently, much of the existing 38.13 acres of riparian forest habitat on the Bank has either a lack of an extensive native shrub layer, a dominance of non-native under-story vegetation, or a limited amount of native tree canopy cover. In addition, past maintenance of the farm berms has removed woody debris on the slopes and limited the capability for new tree and shrub growth. This is especially apparent along Grizzly Slough and the southerly portions of the berm along the Mokelumne River. The diminished tree and shrub cover compared to an undisturbed condition reduces the overall habitat value of the preservation area. To compound the degraded condition, the site is cut off from a more natural floodplain hydrological cycle that would sustain a typical riparian floodplain ecosystem. Enhancement activities are proposed as part of the Bank development that will both indirectly and directly improve the conditions of the existing riparian forest.

Three indirect activities associated with Bank establishment will elevate the baseline conditions of the existing riparian forest on the Bank. Removal of existing debris on the Bank will prevent future disturbance and open areas for native habitat reestablishment. Discontinuing farming along the perimeter of the large remaining stand of existing floodplain riparian habitat will prevent further impacts to the root systems of large native trees and allow for recruitment of seedlings and herbaceous vegetation. Breaching the farm berm along the Cosumnes River will reintroduce a natural floodplain hydrologic process to the site, thereby: improving nutrient deposition, increasing hydrology, and expanding opportunities for native vegetation establishment.

More active measures intended to directly increase the habitat value of the existing riparian forest will include, but are not limited to: (A) limiting the spread of non-native, plant species, such as Himalaya blackberry (*Rubus armeniacus*), poison hemlock (*Conium maculatum*), and perennial pepperweed (*Lepidium latifolium*), (B) installation of new native plants, such as Valley oak (*Quercus lobata*), and (C) placement of habitat structures within the existing habitat patch, through re-using trees removed at the breach for upland woody debris and habitat structure. The locations that would receive the supplemental enhancement activities are located in two main areas (1) along the farm berms of the Mokelumne River, Cosumnes River and Grizzly Slough, and (2) the existing patch of oaks on the western edge of the farm fields.

The existing farm berms' topography ranges from elevation 5 to 15 feet and are typically steep-sided slopes with relatively flat tops. Much of the exterior (i.e., water side) of the berms are already covered with an intact and vibrant stand of oaks, alders, and associated native understory vegetation, while the interior portions of the levees have been maintained on a continual basis and cleared entirely or in part of trees and shrubs. To increase cover in disturbed areas, Valley oak acorns will be planted among the existing vegetation at a rate of 50 plantings per acre. The



halting of vegetation removal along the sides of the berms will encourage natural restoration of herbaceous and vine species. In areas where restoration of natural hydrology does not exhibit active recruitment of native species within one growing season, installation of nursery stock plants such as California wild rose (*Rosa californica*), coyote brush (*Baccharis pilularis*), California grape (*Vitis californica*) and Mexican elderberry (*Sambucus mexicana*) will occur at a rate up to 20 plantings per acre, and Santa Barbara sedge (*Carex barbarae*) at a rate up to 50 plantings per acre. As the plants mature, new acorn plantings may be done to supplement the spots that have slower growth resulting in higher tree density and faster canopy cover of the berm.

The existing oak woodland's topography ranges from 7 to 9 foot elevation with a gentle slope northwards to the Cosumnes River. The overstory canopy is well intact with Valley oaks, but the native understory is limited due to removal of native shrubs and a subsequent dominance of non-native vegetation. The vegetative enhancement activities in the existing oak woodland will include nursery stock planting of native understory associates, including box elder (*Acer negundo*), California wild rose and California grape at a rate of 10 plantings per acre.

The nursery stock plantings in both areas would only be done near existing trees/shrubs to protect the new plants from direct sun exposure. Elevated groundwater associated with restoration of natural hydrology, as well as planting at the start of the rainy season, will provide adequate growing conditions for nursery stock plant establishment. Prior to planting, invasive plants in the immediate vicinity will be mowed, cut and/or sprayed with herbicide. The removal of non-native, invasive plants will continue on an on-going basis through the establishment period until the time at which the restored areas are able to outcompete the exotics. Spot control will then be done as part of the Long-term Management Plan.

Monitoring and Performance Standards will follow those for the non-wetland riparian plantings, and will be included as part of the overall monitoring evaluation of the riparian forest habitat.